

HTML Styles - CSS

CSS stands for Cascading Style Sheets.

CSS saves a lot of work. It can control the layout of multiple web pages all at once.

What is CSS?

Cascading Style Sheets (CSS) is used to format the layout of a webpage.

With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more!

Tip: The word cascading means that a style applied to a parent element will also apply to all children elements within the parent. So, if you set the color of the body text to "blue", all headings, paragraphs, and other text elements within the body will also get the same color (unless you specify something else)!

Using CSS

CSS can be added to HTML documents in 3 ways:

- **Inline** - by using the `style` attribute inside HTML elements
- **Internal** - by using a `<style>` element in the `<head>` section
- **External** - by using a `<link>` element to link to an external CSS file

The most common way to add CSS, is to keep the styles in external CSS files. However, in this tutorial we will use inline and internal styles, because this is easier to demonstrate, and easier for you to try it yourself.

Inline CSS

An inline CSS is used to apply a unique style to a single HTML element.

An inline CSS uses the `style` attribute of an HTML element.

The following example sets the text color of the `<h1>` element to blue, and the text color of the `<p>` element to red:

Example

```
<h1 style="color:blue;">A Blue Heading</h1>
```

```
<p style="color:red;">A red paragraph.</p>
```

Internal CSS

An internal CSS is used to define a style for a single HTML page.

An internal CSS is defined in the `<head>` section of an HTML page, within a `<style>` element.

The following example sets the text color of ALL the `<h1>` elements (on that page) to blue, and the text color of ALL the `<p>` elements to red. In addition, the page will be displayed with a "powderblue" background color:

Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
body {background-color: powderblue;}
```

```
h1 {color: blue;}
```

```
p {color: red;}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>This is a heading</h1>
```

```
<p>This is a paragraph.</p>
```

```
</body>
```

```
</html>
```

External CSS

An external style sheet is used to define the style for many HTML pages.

To use an external style sheet, add a link to it in the `<head>` section of each HTML page:

Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<link rel="stylesheet" href="styles.css">
```

```
</head>
```

```
<body>
```

```
<h1>This is a heading</h1>
```

```
<p>This is a paragraph.</p>
```

```
</body>
```

```
</html>
```

The external style sheet can be written in any text editor. The file must not contain any HTML code, and must be saved with a .css extension.

Here is what the "styles.css" file looks like:

"styles.css":

```
body {
```

```
  background-color: powderblue;
```

```
}
```

```
h1 {
```

```
  color: blue;
```

```
}
```

```
p {
```

```
  color: red;
```

```
}
```

Tip: With an external style sheet, you can change the look of an entire web site, by changing one file!

CSS Colors, Fonts and Sizes

Here, we will demonstrate some commonly used CSS properties. You will learn more about them later.

The CSS `color` property defines the text color to be used.

The CSS `font-family` property defines the font to be used.

The CSS `font-size` property defines the text size to be used.

Example

Use of CSS color, font-family and font-size properties:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
h1 {
```

```
  color: blue;
```

```
  font-family: verdana;
```

```

    font-size: 300%;
}
p {
    color: red;
    font-family: courier;
    font-size: 160%;
}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>

```

CSS Border

The CSS **border** property defines a border around an HTML element.

Tip: You can define a border for nearly all HTML elements.

Example

Use of CSS border property:

```

p {
    border: 2px solid powderblue;
}

```

CSS Padding

The CSS **padding** property defines a padding (space) between the text and the border.

Example

Use of CSS border and padding properties:

```

p {
    border: 2px solid powderblue;
    padding: 30px;
}

```

CSS Margin

The CSS **margin** property defines a margin (space) outside the border.

Example

Use of CSS border and margin properties:

```

p {
    border: 2px solid powderblue;
    margin: 50px;
}

```

Link to External CSS

External style sheets can be referenced with a full URL or with a path relative to the current web page.

Example

This example uses a full URL to link to a style sheet:

```

<link rel="stylesheet" href="https://www.w3schools.com/html/styles.css">

```

Example

This example links to a style sheet located in the html folder on the current web site:

`<link rel="stylesheet" href="/html/styles.css">`

Example

This example links to a style sheet located in the same folder as the current page:

`<link rel="stylesheet" href="styles.css">`

Chapter Summary

- Use the HTML **style** attribute for inline styling
- Use the HTML `<style>` element to define internal CSS
- Use the HTML `<link>` element to refer to an external CSS file
- Use the HTML `<head>` element to store `<style>` and `<link>` elements
- Use the CSS **color** property for text colors
- Use the CSS **font-family** property for text fonts
- Use the CSS **font-size** property for text sizes
- Use the CSS **border** property for borders
- Use the CSS **padding** property for space inside the border
- Use the CSS **margin** property for space outside the border

Exercise:

Use CSS to set the background color of the document (body) to yellow.

```
<!DOCTYPE html>
<html>
<head>
<style>
  [ ] [ ]
  [ ]:yellow;
  [ ]
</style>
</head>
<body>

<h1>My Home Page</h1>

</body>
</html>
```